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High power nano-Nb₂O₅ negative electrodes for lithium-ion batteries

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Highlights

- High surface area semi-crystalline Nb₂O₅ can be directly synthesized *via* CHFS.
- The as-obtained Nb₂O₅ displayed excellent electrochemical performance.
- At high current rates, the Nb₂O₅ behaved like an oxide supercapacitor material.
- Pseudocapacitive reactions contributed to >63% of the total charge at 5 mV s⁻¹.

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